

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

Claims 1-140 (Cancelled)

141. (Currently Amended) A method of promoting healing or regeneration of damaged eye epithelium or cornea or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with eye epithelium, cornea or anterior segment damage, such damage comprising a corneal epithelial defect, membrane rupture, corneal damage associated with eye surgery, eye injury associated with aging, physical, chemical, radiation or medication damage, or chronic corneal edema, ~~or pain thereof~~, a therapeutic amount of an agent ~~agent(s) comprising a high-density lipoprotein (HDL), and/or a non-cholesterol lipid component(s) thereof able to reconstitute HDL~~ comprising one or more members selected from the group consisting of:

a high-density lipoprotein;

a reconstituted high-density lipoprotein; and

a combination of non-cholesterol lipid components capable of reconstituting a high-density lipoprotein comprising one or more of a

sphingolipid and a phospholipid, and one or more of a glyceride and a triglyceride.

142. (Currently Amended) The method of claim 141, wherein the ~~therapeutic amount of the agent(s) comprise(s) an eye epithelium regenerative amount thereof~~ agent further comprises glycerol.

143. (Currently Amended) The method of claim 141, wherein the agent further comprises at least one apolipoprotein ~~comprises HDL, a sphingolipid(s), an apolipoprotein(s), a non-cholesterol lipid comprising a phospholipid(s) and/or another HDL lipid component(s), or a mixture(s) thereof.~~

144. (Currently Amended) The method of claim 141, wherein the eye surgery associated with corneal damage comprises laser surgery, photorefractive keratectomy, or radial keratotomy ~~or pain thereof.~~

145. (Currently Amended) The method of claim 141, wherein the corneal damage comprises epithelium or stroma damage, ~~or pain thereof.~~

146. (Currently Amended) The method of claim 141, wherein the radiation associated with eye injury comprises ultraviolet radiation or sunlight ~~pain thereof.~~

147. (Canceled)

148. (Currently Amended) The method of claim 141, wherein the chronic corneal edema is associated with epithelium erosion or recurrent epithelium erosion ~~pain thereof.~~

149. (Canceled)

150. (Currently Amended) The method of claim 141, wherein epithelial defect comprises a spontaneous peeling of the epithelium ~~or pain thereof.~~

151. (Currently Amended) The method of claim 141, wherein the eye injury is associated with burns ~~or pain thereof.~~

152. (Currently Amended) The method of claim 141, wherein the disorder or condition comprises spontaneous peeling or a systemic disorder or condition ~~or pain thereof.~~

153. (Currently Amended) The method of claim 152, wherein the systemic disorder or condition comprises Sjogren syndrome, Steven-Johnson syndrome, Cicatricial pemphingoid syndrome, impaired tear film formation, or chronic edema of the cornea ~~those following epithelial damage associated with radial keratotomy or pain thereof.~~

154. (Previously Presented) The method of claim 141, wherein the promotion of healing or regeneration of damaged eye epithelium comprises symptom alleviation, or curing or prevention thereof.

155. (Previously Presented) The method of claim 141, wherein the eye epithelium comprises corneal and/or conjunctival epithelium.

156. (Previously Presented) The method of claim 155, wherein the corneal or conjunctival epithelium comprises epithelial cells or glands.

157. (Currently Amended) The method of claim 141, wherein the disorder or condition is associated with physical damage, chemical damage, a slow regeneration rate of epithelial cells, or diminished conjunctival glandular secretion ~~or pain thereof~~.

158. (Currently Amended) The method of claim 141, wherein the disorder or condition comprises a disease or defect associated with systemic or topical medication ~~medication(s) or pain thereof~~.

159. (Currently Amended) The method of claim 141, wherein the agent further comprises albumin or an ophthalmic agent ~~agent(s)~~.

160. (Currently Amended) The method of claim 159, wherein the ophthalmic agent(s) ~~comprise(s)~~ agent comprises one or more members selected from the group consisting of an EGF factor(s) an epidermal growth factor, an attachment factor factor(s), an extracellular matrix component component(s) or an and a UV light protecting agent agent(s).

161. (Currently Amended) The method of claim 160, wherein

the ~~EGF factor(s) comprise(s)~~ epidermal growth factor comprises keratinocyte growth factor factor(s);

the attachment factor comprises ~~factor(s) comprise(s)~~ laminin or fibronectin;

the extracellular matrix component comprises ~~component(s) comprise(s)~~ collagen or a heparin sulfate proteoglycan ~~proteoglycan(s)~~; and/or

the UV light protecting agent(s) ~~comprise(s)~~ agent comprises oxybenzone.

162. (Currently Amended) The method of claim 141, wherein the agent agent(s) is provided as a pharmaceutical composition further comprising an ophthalmically acceptable carrier carrier(s).

163. (Currently Amended) The method of claim 162, wherein the pharmaceutical composition is provided in the form of comprises eye drops or a salve.

164. (Currently Amended) The method of claim 162, wherein the pharmaceutical composition comprises an emulsion, micelles or liposomes.

165. (Currently Amended) The method of claim 162, wherein the pharmaceutical composition comprises 0.1 to 20% agent ~~agent(s)~~.

166. (Currently Amended) The method of claim 162, wherein the pharmaceutical composition comprises 0.2 to 10% agent ~~agent(s)~~.

167. (Currently Amended) The method of claim 162, wherein the pharmaceutical composition comprises ~~[[an]]~~ a hyperosmotic formulation, ~~and may further comprise a salt(s)~~.

168. (Currently Amended) The method of claim 141, wherein ~~at least one~~ the agent ~~agent(s)~~ ~~is associated with~~ causes a net cellular efflux of cholesterol from cells.

169. (Canceled)

170. (Currently Amended) The method of claim 141, wherein the disorder or condition comprises at least one of mechanical abrasion of the cornea, corneal epithelial defects created by contact lens wearing, corneal epithelial defects created by spontaneous peeling of the epithelium, corneal damage following

photorefractive keratectomy, injuries caused by chemical substances, injuries caused by U.V. light exposure, corneal epithelium damage caused by medication, chronic edema of cornea with recurrent erosion of epithelium, and a condition ~~following~~ caused by damage of epithelia due to radial keratotomy ~~or~~ ~~pain thereof~~.

171. (Currently Amended) The method of claim 141, wherein the anterior segment of the eye comprises ~~at least one of~~ corneal epithelium ~~or~~ and/or stromal conjunctiva.

172. (Currently Amended) The method of claim 157, wherein the slow rate of regeneration is associated with ~~at least one of~~ old age ~~or~~ and/or the administration of anti-proliferative substances.

173. (Currently Amended) The method of claim 141, wherein the ~~HDL~~ high-density lipoprotein comprises at least one member selected from the group consisting of human high-density lipoprotein and bovine high-density lipoprotein ~~human HDL, bovine HDL or reconstituted HDL comprising phospholipids and/or sphingolipids and at least one apolipoprotein~~.

174. (Currently Amended) The method of claim 141 443, wherein the phospholipid comprises ~~phospholipids(s) comprise(s)~~ at least one member selected from the group consisting of phosphatidyl choline, phosphatidylethanolamine, phosphatidylserine ~~or~~ and phosphatidylinositol.

175. (Currently Amended) The method of claim 141 443, wherein the ~~sphingolipids~~ sphingolipid comprise at least one sphingomyelin ~~sphingomyelin(s)~~.

176-178. (Canceled)

179. (Currently Amended) The method of claim 143 478, wherein the apolipoprotein ~~apolipoprotein(s)~~ comprises at least one member selected from the group consisting of apolipoprotein A-I, apolipoprotein II₁ ~~or~~ apolipoprotein E, apolipoprotein IV, and a combination of any two or more thereof ~~apolipoprotein IV or a mixture or combination thereof~~.

180. (Canceled)

181. (Currently Amended) The method of claim 141, wherein the agent comprises at least one of Lipofundin ® ~~or~~ and Intralipid®.

182. (Currently Amended) The method of claim 162, wherein the pharmaceutical composition further comprises one or more members selected from the group consisting of albumin, a growth factor factor(s), an attachment factor factor(s) ~~or~~ and an extracellular component component(s).

183. (Currently Amended) The method of claim 182, wherein

the growth factor comprises at least one member selected from the group consisting of keratinocyte growth factor (KGF/FGF7), epidermal growth factor (EGF), and fibroblast growth factor (FGF) ~~or an FGF(s)~~;

the attachment factor comprises at least one member selected from the group consisting of laminin ~~or~~ and fibronectin; ~~and/or~~ and

the extracellular matrix component comprises at least one member selected from the group consisting of collagen ~~or an~~ and a heparan sulfate proteoglycan ~~proteoglycan(s)~~.

184. (New) A method of promoting healing or regeneration of damaged eye epithelium or cornea or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with eye epithelium, cornea or anterior segment damage, such damage comprising a corneal epithelial defect, membrane rupture, corneal damage associated with eye surgery, eye injury associated with aging, physical, chemical, radiation or medication damage, or chronic corneal edema, a therapeutic amount of an agent comprising:

at least one member selected from the group consisting of a high density lipoprotein and a non-cholesterol lipid component capable of reconstituting a high-density lipoprotein; and

at least one member selected from the group consisting of albumin and an ophthalmic agent.

185. (New) The method of claim 184, wherein the ophthalmic agent comprises one or more members selected from the group consisting of an epidermal growth factor, an attachment factor, an extracellular matrix component, and a UV light protecting agent.

186. (New) The method of claim 185, wherein

the epidermal growth factor comprises keratinocyte growth factor;

the attachment factor comprises laminin or fibronectin;

the extracellular matrix component comprises collagen or a heparin sulfate proteoglycan; and/or

the UV light protecting agent comprises oxybenzone.

187. (New) A method of promoting healing or regeneration of damaged eye epithelium or cornea or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with eye epithelium, cornea or anterior segment damage, such damage comprising a corneal epithelial defect, membrane rupture, corneal

damage associated with eye surgery, eye injury associated with aging, physical, chemical, radiation or medication damage, or chronic corneal edema, a therapeutic amount of a pharmaceutical composition comprising:

one or more members selected from the group consisting of a high-density lipoprotein and a non-cholesterol lipid component capable of reconstituting a high-density lipoprotein; and

an ophthalmically acceptable carrier.

188. (New) The method of claim 187, wherein the pharmaceutical composition comprises eye drops or a salve.

189. (New) The method of claim 187, wherein the pharmaceutical composition comprises an emulsion, micelles or liposomes.

190. (New) The method of claim 187, wherein the pharmaceutical composition comprises 0.1 to 20% agent.

191. (New) The method of claim 187, wherein the pharmaceutical composition comprises 0.2 to 10% agent.

192. (New) The method of claim 187, wherein the pharmaceutical composition comprises a hyperosmotic formulation.

193. (New) A method of promoting healing or regeneration of damaged eye epithelium or cornea or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with a slow regeneration rate of epithelial cells caused by at least one of old age or administration of anti-proliferative substances, a therapeutic amount of an agent comprising

one or more members selected from the group consisting of a high density lipoprotein and a non-cholesterol lipid component capable of reconstituting a high-density lipoprotein.

194. (New) A method of promoting healing or regeneration of damaged eye epithelium or cornea or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with eye epithelium, cornea or anterior segment damage, such damage comprising a corneal epithelial defect, membrane rupture, corneal damage associated with eye surgery, eye injury associated with aging, physical, chemical, radiation or medication damage, or chronic corneal edema, a therapeutic amount of an agent comprising:

a high-density lipoprotein comprising at least one member selected from the group consisting of human high-density lipoprotein; bovine high-density lipoprotein; and reconstituted high-density lipoprotein comprising at least one apolipoprotein and one or more of a phospholipid and a sphingolipid.

195. (New) A method of promoting healing or regeneration of damaged eye epithelium or cornea or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with eye epithelium, cornea or anterior segment damage, such damage comprising a corneal epithelial defect, membrane rupture, corneal damage associated with eye surgery, eye injury associated with aging, physical, chemical, radiation or medication damage, or chronic corneal edema, a therapeutic amount of an agent comprising at least one of Lipofundin ® or Intralipid®.

196. (New) The method of claim 187, wherein the pharmaceutical composition further comprises one or more members selected from the group consisting of albumin, a growth factor, an attachment factor, and an extracellular component .

197. (New) The method of claim 196, wherein

the growth factor comprises at least one member selected from the group consisting of a keratinocyte growth factor, an epidermal growth factor and a fibroblast growth factor;

the attachment factor comprises at least one member selected from the group consisting of laminin and fibronectin; and/or

the extracellular matrix component comprises at least one member selected from the group consisting of collagen and a heparan sulfate proteoglycan.

198. (New) A method for treating disorders of the anterior segment of the eye comprising administering to a subject in need of such treatment a therapeutically effective amount of a composition comprising one or more high-density lipoproteins selected from the group consisting of:

- a natural high density lipoprotein; and
- a reconstituted high density lipoprotein.

199. (New) The method of claim 198, wherein the reconstituted high density lipoprotein comprises a combination of at least one apolipoprotein and at least one non-cholesterol containing lipid component capable of reconstituting a high-density lipoprotein.

200. (New) The method of claim 199, wherein the at least one non-cholesterol containing lipid component capable of reconstituting a high-density lipoprotein comprises one or more members selected from the group consisting of a phospholipid, a spingolipid, a glyceride, a triglyceride, and glycerol.

201. (New) The method of claim 198, wherein the natural high density lipoprotein comprises one or more members selected from the group consisting of human high-density lipoprotein and bovine high-density lipoprotein.

202. (New) A method for treating disorders of the anterior segment of the eye comprising administering to a subject in need of such treatment a therapeutically effective amount of a composition comprising a combination of non-cholesterol lipid components capable of reconstituting a high-density lipoprotein comprising one or more of a sphingolipid and a phospholipid, and one or more of a glyceride and a triglyceride.

203. (New) A method for treating disorders of the anterior segment of the eye comprising administering to a subject in need of such treatment a therapeutically effective amount of a composition comprising Lipofundin®.

204. (New) A method for treating disorders of the anterior segment of the eye comprising administering to a subject in need of such treatment a therapeutically effective amount of a composition comprising Intralipid®.